

two or three distant growth lines. Beaks prominent and surrounded by four or five coarse, sharp, widely separated irregular undulations. Ligament reddish, short, thin and scarcely elevated above the dorsum. Dorsal margin slightly elevated; anterior margin gracefully rounded, base uniformly and slightly curved; posterior margin pointed. Posterior area abrupt with two slightly raised lines formed of irregular elevations from beak to margin. Umbos gracefully and uniformly rounded; greatest diameter in the centre of the disk. Nacre sky-blue throughout, sometimes darker within the pallial line. Beak cavities slight and abrupt. Cicatrices well impressed, smooth and distinct. Cardinals solid, prominent, double in the left valve and single in the right valve, laterals double in the left valve and disposed to be double or tripartite in the right valve and joined to the posterior cardinal by a distinct elevation of the dorsal plate.

Width $1\frac{1}{4}$ in., length 1 in., diam. $\frac{5}{8}$ in.

Habitat: Ocklocknee River, Leon County, Florida.

Type in National Museum.

Remarks:—This anomalous little shell was taken with *U. kleinianus* Lea, *lieuosus* Con., *kirklaudianus* Wright and *floridensis* Lea. It does not seem to group well with any known species, though the the beak sculpture indicates a relationship with *U. forbesianus* Lea. In some respects it reminds one of *U. macrodon* Lea, but it is more inflated, not as solid usually, darker in epidermis, rayless, with deeper beak and shell cavities. The lateral teeth are longer, higher and end more abruptly, besides being double or tripartite in the right valve. The very young show slight traces of broad, distant rays. It certainly groups with *U. forbesianus* Lea, but is easily distinguished from the young of that species by its want of rays, lighter epidermis, rounded base, rounded umbonal angle, flattened umbos and it is smoother on the posterior area.

NEW PISIDIA.

BY DR. V. STERKI.

Pis. singleyi n. sp.

Mussel small, rather high, somewhat oblique, ventricose, beaks prominent, also in the young, rounded but narrow on top, slightly posterior, vertical section broadly heart-shaped; superior margin moderately curved, rather short, scutellum slightly, scutum well

marked; anterior part somewhat angular with the end rounded; posterior end rounded or slightly truncate, inferior margin regularly curved; shell thin, translucent, colorless to pale horn; surface very finely, almost regularly striated, somewhat shining; interior surface with fine but well marked, crowded pits, visible from the outside; hinge rather fine, plate narrow, cardinal teeth rather short but high, lamellar, the right one almost straight and longitudinal in its anterior part, thickened in the posterior and curved downward beyond the level of the plate; those of the left valve little curved, the inferior somewhat the larger and projecting downward over the edge of the hinge plate; lateral teeth rather small and thin, pointed in the middle and rather abrupt, in the right valve the anterior much the largest, slightly projecting inward.

Long. 2.5, alt. 2.3, diam. 1.7 mill. (Texas).

Long. 3.3, alt. 2.8, diam. 2.4 mill. (Mexico).

Habitat: Texas, Mexico.

In shape, color and striation, it has some resemblance with *P. punctatum*, but the latter is much smaller, its surface is microscopically rugulose, dull, and the hinge comparatively stouter.

It was first seen in drift materials from the Guadalupe River, Comal Co., Texas, collected and kindly sent by Mr. J. A. Singley in 1892, represented by a fair number of specimens in all stages of growth. Then in drift from the same river, sent by Mr. Wm. A. Marsh, a few young specimens. Another lot from the Guadalupe River is in the U. S. National Museum (No. 134,010, Gurley), and under the same head must be ranged one from Itzlan Creek, Guadalupe, Mexico, (No. 102,215). Of the largest specimen of them the dimensions are given above. The species is named in honor of Mr. J. A. Singley.

Figs. *splendidulum* n. sp.

Mussel small, well inflated, rather ovoid in outline, scutum and scutellum rather well marked, the former often prominent; beaks slightly posterior, somewhat prominent, moderately large, rounded; color pale to deep horn, surface polished, with very fine, somewhat irregular striæ; shell thin, transparent; hinge rather fine but well formed, plate narrow; cardinal teeth longitudinal, lamellar, the right one rather long, slightly curved, most so at both ends, more or less thickened at the posterior end, and often with a groove; the two in the valve nearly equal, parallel, little curved, the superior is anterior for about one-third of its length; lateral teeth compara-

tively strong, all projecting into the interior of the mussel, pointed ; ligament rather long.

Long. 2·8, alt. 2·4, diam. 1·7 mill.

Hab. : Maine, Virginia, Michigan.

At Caribou, Aroostook Co., Me., mainly in the Barren Brook, Mr. Ol. O. Nylander collected, and sent me for examination in different lots, more than three thousand specimens. Mr. H. W. Winkley collected some near Saco, Me., and in Mr. J. B. Henderson's collection are a few lots from Old Orchard, Me. Mr. L. H. Streng sent in different lots about 1200 specimens collected near Grand Rapids, Michigan ; and the writer has found it rather common in the Potomac River at Washington, D. C., as well as in different runs and ditches in Virginia near the National Capital.

Our species cannot be mistaken for any other *Pisidium*. In shape it has some resemblance with *P. abditum* and *politum* ; but its small size, the color and transparency of the shell, the shape of the cardinal teeth, will readily distinguish it. In size, color and transparency of the shell, and the polished surface, it resembles *P. ventricosum* and *vesiculare* ; but both the latter are much more inflated, their beaks are quite posterior and larger. It is, however, rather variable in size and coloration, and the striation of the surface.

(*To be concluded*).

ELWOOD PLEAS.

It is with sincere regret that we record the death of our old friend and correspondent, Mr. Elwood Pleas, of Dunreith, Henry Co., Indiana, which occurred on December 31, 1897. He was born May 4, 1831, and the greater portion of his life was spent in Henry County. For a number of years he was Editor of "The Newcastle Courier" and the old files of this and other papers bear ample evidence of his earnest ability as an editor. His most interesting articles were those pertaining to his favorite study, Natural History. Mr. Pleas was well known to many readers of THE NAUTILUS, his principal contribution being "Shells of Henry Co., Indiana," (Vol. VII, page 65). In this article he recorded 123 species and varieties of land and fresh water shells found by him within a radius of five miles from his home.